Discussion of *Deposit Supply and Bank Transparency*

Mary E. Barth
Stanford University

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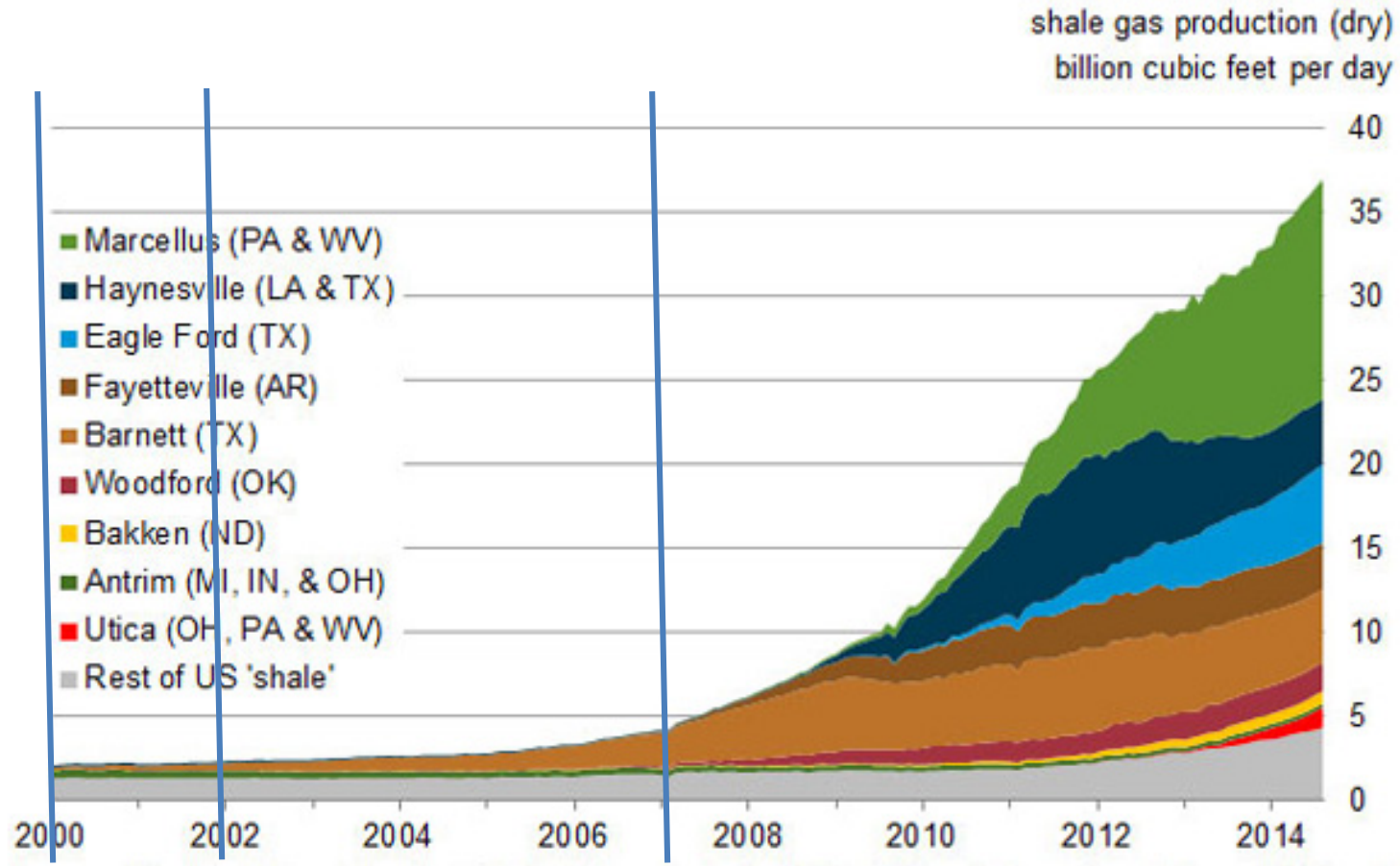
Overview

- Nice setting to study effects on voluntary disclosure of reduced reliance on capital markets
  - Prior research shows firms that access capital markets are more likely to provide voluntary disclosure
  - Follows other studies that exploit the unexpected change in shale development technology
  - This paper adds an accounting angle to this event
- Findings
  - Greater exposure to shale development reduced voluntary disclosure
- Interpretation
  - Deposit windfalls relax incentives for banks to disclose information voluntarily to attract funds

US shale production

U.S. dry shale gas production



Sources: EIA derived from state administrative data collected by DrillingInfo Inc. Data are through August 2014 and represent EIA's official shale gas estimates, but are not survey data. State abbreviations indicate primary state(s).

Chain of logic

2002 shale development positive shock to deposits for exposed banks

Exposed

Increase in deposits

Decrease in external capital

Decrease in voluntary disclosure

Exposed banks?

Key assumptions

- Shale development was unanticipated and increased bank deposits in the shale boom counties
  - Supported by prior research
- O&G companies moved so fast that banks could not respond by opening branches in the affected areas
  - Would be nice to have some evidence
  - Dates seem to vary across counties—How long does it take to open a branch?
- Any capital market cost to the bank of reduced disclosure (e.g., increased illiquidity) is less than the cost of the voluntary disclosures
  - Would be nice to have corroborating evidence here too

Tests

Exposed

2002 shale development
positive shock to deposits
for exposed banks

10-K MD&A
8-K voluntary items
Earnings guidance
Stock liquidity

Increase in deposits

Decrease in voluntary disclosure

Remember the chain of logic

Exposed

Increase in deposits

Decrease in external capital

Decrease in voluntary disclosure

Link deposits and external capital

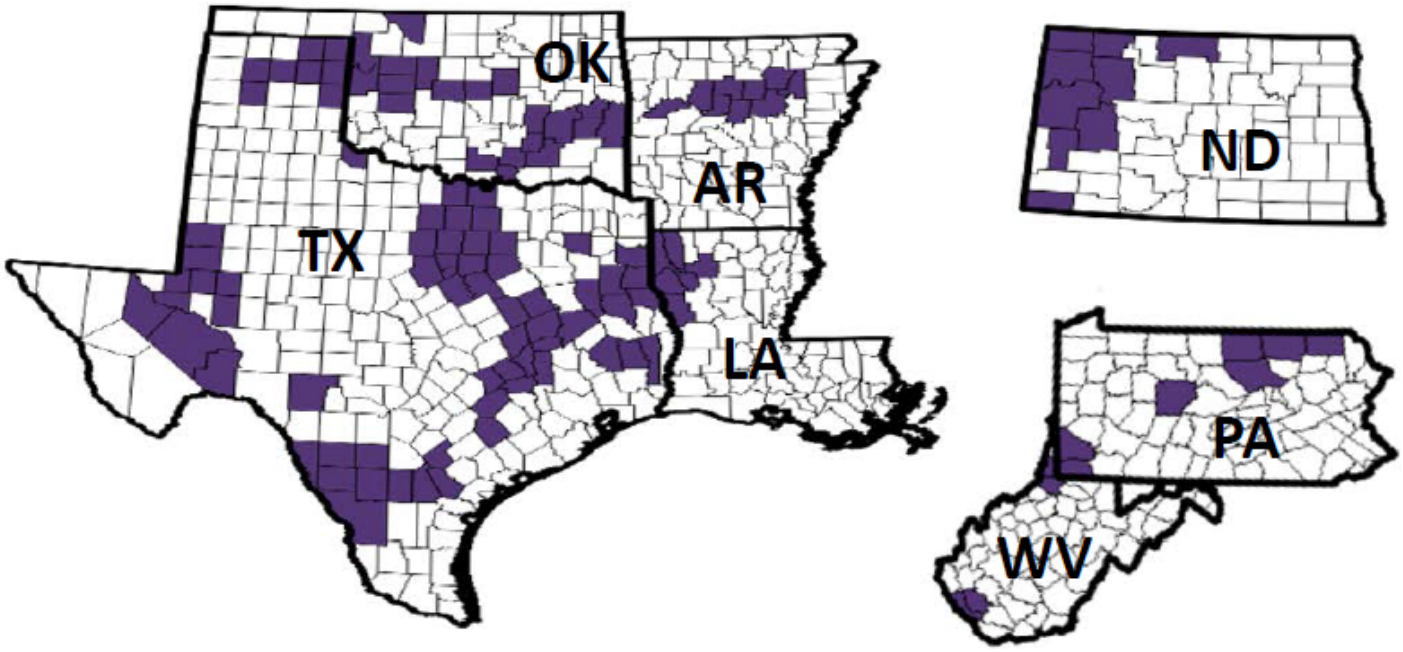
- Evidence linking increase in deposits and capital market activity would strengthen the paper
  - Study shows disclosure reductions are stronger for banks that relied more heavily on capital markets in the pre-boom period. But….
  - Would exposed banks have accessed the capital market without the deposit increase?
  - Did exposed banks' capital market access decrease during this period? If so, is the extent of the decrease associated with the amount the new deposits?
  - Are these effects larger for banks closer to funding constraints?

I would like to know more

- Which geographical areas are included in the study and when did exposure begin in each?
  - Gilje, Loutskina, and Strahan (2013) covers 2003-2010
  - Plosser (2014) covers seven states for 2003-2012
  - This study covers 2003-2007—Why? Does it matter?

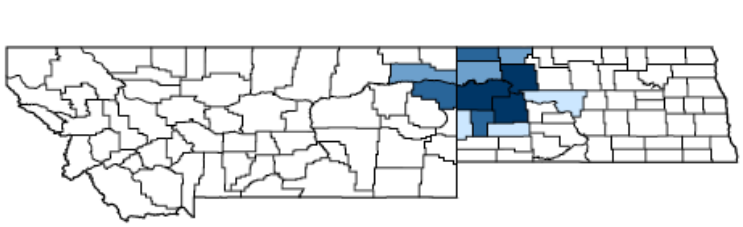
Counties in Gilje, Loutskina, and Strahan (2013)

Figure 1: Location of Shale Activity
The figure maps the counties of the 7 shale boom states included in this study: AR, LA, ND, OK, PA, TX and WV. White counties are non-boom counties while shaded counties are shale boom counties as of 2010.

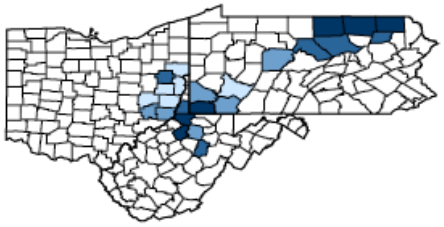


Gilje, Loutskina, and Strahan (2013)

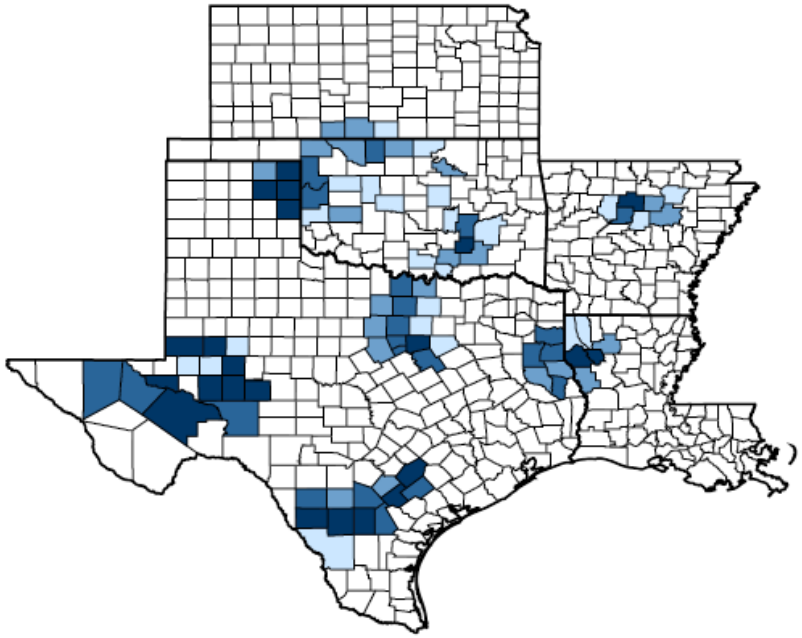
Counties in Plosser (2014)



(a) Montana, North Dakota



(b) Ohio, Pennsylvania, West Virginia



(c) Arkansas, Kansas, Louisiana, Texas

Figure 1: Counties Impacted by Unconventional Energy

Figure 1 illustrates the location of counties impacted by unconventional energy development. Shaded counties are divided into quartiles based on the maximum annual payments to landowners relative to lagged deposits.

Plosser (2014)

I would like to know more

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  - Plosser (2014) covers seven states for 2003-2012
  - This study covers 2003-2007—Why? Does it matter?
- How large were the initial lease payments? Would they lead to economically meaningful increases in deposits at the affected banks?
- Bank exposure measure based on wells drilled from 2003 to 2007
  - Link to initial land lease payments?
  - Justification? Rational expectations?

I would like to know more

- The geographical location of bank branches is key to research design
  - Is lack of depositor sophistication another assumption?
  - Why don't these new large depositors use brokered deposits and other liquid investments?
  - What types of deposits? Non-interest bearing? CDs?
  - Do results hold if bank exposure measure were based on number of branches in a shale boom county?
  - Did you consider falsification tests, e.g., using a pseudo event date prior to 2002?

I would like to know more

- How does the importance of local branches—together with the assumption regarding insufficient reaction time—affect potential effects of competition?
  - It seems local bank branches are immune to competition
  - If so, why would competition be associated with bank reactions to deposit increases from shale development?

Opportunities to build on related research

- Plosser (2014) shows how banks invest the "extra" unsolicited deposits (e.g., lending versus liquid assets), whereas here the story is substituting deposit increases for other sources of capital
  - Do banks' investments differ for the portion of the deposit increase that is "extra" versus substituted?
- Gilje, Loutskina, and Strahan (2013) shows affected banks increase mortgage lending in non-boom counties, and conclude that branch networks help integrate US lending markets
  - What role do branch networks play here?

Other points

- Size, loan loss provision, loss, and capital-asset ratio are controls for "time-varying BHC traits"
  - Why these? What are they intended to capture?
  - Control for number of branches in boom counties?
- *Competition* is based on 2003, and is constant over time
  - Why not 2002? Why constant? If it varied could estimate of its main effect and might affect the interaction coefficient
- Tests focus on mean changes 2000-2002 to 2003-2007
  - Why not focus on change in year lease activity began?
  - Perhaps interact bank exposure with post-shock indicator?
- Cluster standard errors by BHC
  - Why not also by time? Cross-sectional correlation is likely

Other points

- A correlation table for all variables would be helpful
- Particularly, the various disclosure variables
  - It seems they would be highly correlated, but perhaps capture different aspects of disclosure
  - Not necessarily independent tests
  - Might want to consider factor analysis or another way to construct a single voluntary disclosure measure
  - If differences are important, these need further development
- The modifications variable needs more explanation
  - How are zero modifications coded? Log(1 – 1) is undefined
  - What is the interpretation of a positive mean?

Conclusion

- Interesting paper!
- Thank you for the opportunity to discuss it; I enjoyed reading the paper and learned a lot
- I hope my comments are helpful to you in improving the paper and wish you all the best with it!

Thank you!